

March 14, 2018

Leslie B. Holz Department of Veterans Affairs Montana VA Healthcare System 3687 Veterans Drive Fort Harrison, MT 59636

Dear Ms. Holz:

Montana Air Quality Permit #5198-00 is deemed final as of March 14, 2018, by the Department of Environmental Quality (Department). This permit is for a hospital with multiple institutional boilers. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A. Merkel
Permitting Services Section Supervisor

Julio A Merkel

Air Quality Bureau

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for Part Prant

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JM:JPP Enclosure

Montana Department of Environmental Quality Air, Energy & Mining Division

Montana Air Quality Permit #5198-00

Department of Veterans Affairs Montana VA Health Care System 3687 Veterans Drive Fort Harrison, MT 59636

March 14, 2018



MONTANA AIR QUALITY PERMIT

Issued To: Department of Veterans Affairs

Montana VA Health Care System

3687 Veterans Drive Fort Harrison, MT 59636 MAQP: #5198-00

Application Complete: 1/22/2018

Preliminary Determination Issued: 2/9/2018 Department's Decision Issued: 2/27/2018

Permit Final: 3/14/2018

AFS #: 049-0023

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Department of Veterans Affairs – Montana VA Health Care System (VA), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, et seq., as amended, for the following:

Section I: Permitted Facilities

A. Permitted Equipment

- 3 Superior 10,500 thousand British thermal unit per hour (mBtu/hr) dual fuel (natural gas and #2 distillate) boilers
- 2 Superior 8,400 mBtu/hr dual fuel boilers
- 2 Superior 6,300 mBtu/hr dual fuel boilers
- 2 Harsco Modu-Fire 2,000 mBtu/hr boilers
- 1 Burnham 1,384 mBtu/hr boiler
- 4 Burnham 808 mBtu/hr boilers
- 1 Burnham 400 mBtu/hr boiler

B. Plant Location

VA is located in Section 15, Township 10 North, Range 4 West, in Lewis and Clark County, MT. The street address is 3687 Veterans Drive, Fort Harrison, MT 59636.

Section II: Conditions and Limitations

A. Emission Limitations

1. At least once every 3 years, VA shall record an inspection of the boilers for combustion performance. VA shall record the date of the inspection and any adjustments made including cleaning of the nozzles or other actions deemed necessary, as a result of the inspection. The inspection records shall be maintained for a minimum of 5 years from the date of inspection, and shall be submitted to the Department upon request (ARM 17.8.749).

- 2. VA shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 3. VA shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 4. VA shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in Title 40 Code of Federal Regulations (CFR) 60, Subpart Dc (ARM 17.8.340 and 40 CFR 60, Subpart Dc).

B. Testing Requirements

- 1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 2. The Department of Environmental Quality (Department) may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. VA shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
- 2. VA shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
- 3. All records compiled in accordance with this permit must be maintained by VA as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

Section III: General Conditions

A. Inspection – VA shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as Continuous

- Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and the terms, conditions, and matters stated herein shall be deemed accepted if VA fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving VA of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, et seq. (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by VA may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit Analysis Department of Veterans Affairs Montana VA Health Care System MAQP #5198-00

I. Introduction/Process Description

Department of Veterans Affairs – Montana VA Health Care System (VA) owns and operates a hospital with multiple institutional boilers. The facility's legal description is Section 15, Township 10 North, Range 4 West, and is located at 3687 Veterans Drive, Fort Harrison, MT 59636.

A. Permitted Equipment

VA owns and operates the following natural gas-fired boilers:

- 3 Superior 10,500 thousand British thermal unit per hour (mBtu/hr) dual fuel (natural gas and #2 distillate) boilers
- 2 Superior 8,400 mBtu/hr dual fuel boilers
- 2 Superior 6,300 mBtu/hr dual fuel boilers
- 2 Harsco Modu-Fire 2,000 mBtu/hr boilers
- 1 Burnham 1,384 mBtu/hr boiler
- 4 Burnham 808 mBtu/hr boilers
- 1 Burnham 400 mBtu/hr boiler

B. Source Description

VA owns and operates a total of 15 natural gas-fired boilers that are primarily used for hot water, steam production for laundry and equipment sterilization, and facility heating.

C. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department).

Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
 - VA shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
 - 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
 - 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to the following:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
 - 11. ARM 17.8.230 Fluoride in Forage

VA must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, VA shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
 - 7. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
 - 8. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). VA is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart Dc Standard of Performance for Small Industrial—Commercial-Institutional Steam Generating Units. This subpart applies to the Superior 10,500 mBtu/hr boilers because they are greater than 10 million British thermal units per hour (mmBtu), but less than 100 mmBtu/hr and are meet the definition of an institutional boiler.

- 9. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories</u>. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. This facility is not a NESHAP-affected source because it does not meet the definition of any NESHAPs Subpart defined in 40 CFR Part 63.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. VA submitted the appropriate permit application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.
 - An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.
- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. VA has a PTE greater than 25 tons per year of nitrogen oxide (NO_X) and carbon monoxide (CO); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.(1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source.

The VA submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. VA submitted an affidavit of publication of public notice for the January 22, 2018 issue of the *Helena Independent Record*, a newspaper of general circulation in the Town of Helena in Lewis and Clark County, as proof of compliance with the public notice requirements.

- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving VA of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
- 10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
- 12. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 13. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

- 14. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 15. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- 16. <u>ARM 17.8.770 Additional Requirements for Incinerators</u>. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).
- 17. <u>ARM 17.8.771 Mercury Emission Standards for Mercury-Emitting Generating Units</u>. This rule identifies mercury emission limitation requirements, mercury control strategy requirements, and application requirements for mercury-emitting generating units.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. $PTE > 70 \text{ tons/year of particulate matter with an aerodynamic diameter of } 10 \text{ microns or less } (PM_{10}) \text{ in a serious } PM_{10} \text{ nonattainment area.}$

- 2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5198-00 for VA, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS (40 CFR 60, Subpart Dc).
 - e. This facility is not subject to any current NESHAP.
 - f. This source is not a Title IV affected source.
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that VA will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, VA will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. VA shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

The Department determined that because the boilers are primarily natural gas-fired, any additional pollution control devices would be economically infeasible and technically impractical for the small amount of emissions reduction they could achieve. Work practice standards to include periodic tune-ups and emissions checks to ensure the boiler(s) are firing optimally are prescribed to confirm ongoing proper operation in this case. The Department has determined that proper operations and compliance with any applicable federal emissions limits and standards with no additional requirements constitutes BACT.

IV. Emission Inventory

	Btu/hr	NO _x	со	so _x	voc	PM	PM _{Cond} .	PM _{Filt} .
2 Superior 8,400 mBtu/hr	16,800,000	7.21	6.06	0.04	0.40	0.55	0.41	0.00
2 Harsco Modu-Fire 2,000 mBtu/hr	4,000,000	1.72	1.44	0.01	0.09	0.13	0.10	0.00
3 Superior 10,500 mBtu/hr	31,500,000	13.53	11.36	0.08	0.74	1.03	0.77	0.00
2 Superior 6,300 mBtu/hr	12,600,000	5.41	4.54	0.03	0.30	0.41	0.31	0.00
1 Burnham 1,384 mBtu/hr	1,384,000	0.59	0.50	0.00	0.03	0.05	0.03	0.00
4 Burnham 808 mBtu/hr	3,232,000	1.39	1.17	0.01	0.08	0.11	0.08	0.00
1 Burnham 400 mBtu/hr	400,000	0.17	0.14	0.00	0.01	0.01	0.01	0.00
Total Potential to Emit (ton/year)		30.02	25.22	0.18	1.65	2.28	1.71	0.00

Calculation:
$$\frac{Btu}{hr} \times \frac{SCF}{Btu} \times \frac{lb}{SCF} \times \frac{hr}{yr} \times \frac{ton}{lb} = \frac{ton}{yr}$$

Emission Factor taken from AP 42 – Chapter 1, Section 1.4 – Natural Gas Combustion Potential to Emit calculations based on 8,760 hours per year

	Btu/hr	NO _x	со	SO _x	VOC	PM	PM _{Cond.}	PM _{Filt.}
Total Superior Boilers PTE, ton/yr	60,900,000	46.39	9.66	13.72	1.07	3.87	2.51	3.87

Calculation:
$$\frac{Btu}{hr} \times \frac{hr}{yr} \times \frac{gallon}{btu} \times \frac{lb}{gallon} \times \frac{ton}{lb} = \frac{ton}{yr}$$

Emission factors taken from AP 42 - Chapter 1, Section 1.3 - Fuel Oil Combustion, #2 Distillate Potential to Emit calculations based on 8,760 hours per year

V. Existing Air Quality

VA is located in Section 15, Township 10 North, Range 4 West, in Lewis and Clark County, MT. Areas located inside of Lewis and Clark County have been designated non-attainment for sulfur dioxide and lead. The operation of the boilers would not be expected to have any negative impact on the non-attainment areas. Furthermore, the location of the sulfur dioxide and lead non-attainment site is located approximately 9 miles east, south east from the facility.

VI. Ambient Air Impact Analysis

The Department determined, based on the information provided and conditions established in MAQP #5198-00, that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation
Λ		affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private
	Λ	property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others,
		disposal of property)

YES	NO	
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Department of Veterans Affairs – Montana VA Health Care System

Montana Air Quality Permit number (MAQP): 5198-00

EA Draft: February 9, 2018 EA Final: February 27, 2018 Permit Final: March 14, 2018

- 1. Legal Description of Site: The site is located on Section 15, Township 10 North, Range 4 West, in Lewis and Clark County, MT. The street address is 3687 Veterans Drive, Fort Harrison, MT 59636.
- 2. Description of Project: Department of Veterans Affairs Montana VA Health Care (VA) owns and operates a hospital with 15 natural gas-fired boilers located throughout their facility.
- 3. *Objectives of Project:* The objectives for this project are to obtain an MAQP for an existing facility in order to bring it into compliance with applicable state air quality regulations.
- 4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. By not obtaining an MAQP, VA would be in violation of Administrative Rules of Montana, Chapter 17, Section 8, Subsection 7, more specifically, ARM 17.8.743(1)(e) Montana Air Quality Permits, When Required. VA could be subjected to enforcement action. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5198-00.
- 6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
- 7. SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.
 - A. Terrestrial and Aquatic Life and Habitats

This permitting action would be expected to have no effect on the terrestrial and aquatic life and habitats because the facility is in operation as an existing institution with no new proposed construction.

B. Water Quality, Quantity and Distribution

The permitting action would be expected to have no effect on water quality, quantity, and distribution because the facility is already in operation at an existing institutional location with no new or increased demands for water.

C. Geology and Soil Quality, Stability and Moisture

The permitting action would be expected to have no effect on geology, soil quality, stability, and moisture because the boilers are existing sources in an institutional location.

D. Vegetation Cover, Quantity, and Quality

The permitting action would be expected to have no effect on vegetative cover, quantity, and quality of vegetation because the boilers are existing sources with no new proposed construction.

E. Aesthetics

The permitting action would be expected to have no effects on the aesthetics because the boilers are located indoors and are not visible or audible.

F. Air Quality

The permitting action would be expected to have no effects on air quality. The facility would be considered a minor source of air pollution by institutional standards and is located in an area where there are no known air quality issues. The permitting action does not require any changes to the current methods of operation of the emitting units.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The permitting action would have no impact on unique endangered or fragile species, or limited environmental resources because the boilers are operated on an already existing institutional site.

H. Sage Grouse Executive Order

The Department recognizes that the initial site selection in not within the Greater Sage Grouse habitat as defined by Executive Order No. 12-2015.

I. Demands on Environmental Resource of Water, Air and Energy

The permitting action would be expected to have no effect on the demands for environmental resources for water and energy as there are no new emission units being contemplated. Current demands for water and energy are not expected to change with the issuance of this MAQP.

J. Historical and Archaeological Sites

The permitting action would be expected to have no impacts on historical and archaeological sites.

The boilers are used on pre-established facilities where Historical and Archaeological surveys would have already been completed if they were warranted. There are a number of buildings located on the facility property that have already been identified by the State Historical Preservation Office, however, the continued operation of the boilers would not impact those facilities.

K. Cumulative and Secondary Impacts

Cumulative or secondary impacts are not expected as a result of the project. The facility would be considered a minor source of emissions by institutional standards and no new construction or changes in operation are expected.

8. The following section summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The permitting action would be expected to have no impacts on social structures and mores because the boilers are existing sources operated at an already existing institutional location.

B. Cultural Uniqueness and Diversity

The permitting action would be expected to have no effect on cultural uniqueness and diversity because the boilers are existing sources operated at an already existing institutional site with no expected new construction.

C. Local and State Tax Base and Tax Revenue

The permitting action would have a minor effect on the local and state tax base and tax revenue due to the taxes generated from the purchase of supplies and the employee payroll.

D. Agricultural or Industrial Production

The permitting action would not displace or otherwise affect any agricultural land or practices because the boilers are operated at an existing institutional facility.

E. Human Health

MAQP #5198-00 would incorporate conditions to ensure that the facility would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. The current action is expected to have no negative impacts to human health.

F. Access to and Quality of Recreational and Wilderness Activities

The permitting action would be expected to have no effect on access to or aesthetic attribute of recreational and wilderness activities in the area.

G. Quantity and Distribution of Employment

The permitting action would be expected to have no effect on quantity and distribution of employment because it is an existing facility with no planned changes associated with the action.

H. Distribution of Population

The permitting action would be expected to have no impact on the distribution of population because it would not increase the population in the area.

I. Demands for Government Services

The permitting action would have a minor effect on demand for government services. Government services would be required for acquiring the appropriate permits from government agencies. In addition, the permitted sources of emissions would be subject to periodic inspections by government personnel.

J. Industrial and Commercial Activity

The permitting action would be expected to have no impact on industrial and commercial activity because there are no planned changes proposed for the already existing institutional site.

K. Locally Adopted Environmental Plans and Goals

There are no known locally adopted Environmental Plans and Goals for the immediate and surrounding areas.

L. Cumulative and Secondary Impacts

Overall, the impact generated with this project would result in minor cumulative and secondary impacts that affect the economic and social environment in the immediate area. The Department believes that this facility would be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #5198-00.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the operation of multiple existing natural gas-fire boilers. MAQP #5198-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

<u>Individuals or groups contributing to this EA</u>: Department of Environmental Quality – Air Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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Date: January 24, 2018